

3. (Amended) The method of forming a powder compact of claim 2, wherein said metal salt of a higher fatty acid is a lithium salt, a calcium salt, or a zinc salt of a higher fatty acid.

4. (Amended) The method of forming a powder compact of claim 1, wherein said higher fatty acid lubricant is dispersed in water.

5. (Amended) The method of forming a powder compact of claim 4, wherein said higher fatty acid lubricant is dispersed in water containing a surfactant.

6. (Amended) The method of forming a powder compact of claim 5, wherein said higher fatty acid lubricant has a maximum particle diameter of less than 30 μm .

7. (Amended) The method of forming a powder compact of claim 1, wherein said heated die has a temperature of 100 °C or more.

8. (Amended) The method of forming a powder compact of claim 7, wherein said heated die has a temperature below the melting point of said higher fatty acid lubricant.

9. (Amended) The method of forming a powder compact of claim 1, wherein said metal powder has been heated.

10. (Amended) The method of forming a powder compact of claim 1, wherein said metal powder comprises iron powder.

11. (Amended) The method of forming a powder compact of claim 1, wherein said metal powder further comprises said higher fatty acid lubricant.

12. (Amended) The method of forming a powder compact of claim 10, wherein said metal powder further comprises said higher fatty acid lubricant.

13. (Amended) The method of forming a powder compact of claim 11, wherein said metal powder comprises 0.1% or more by weight of said higher fatty acid lubricant.

14. (Amended) A method of forming a powder compact comprising:

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applying a metal salt of higher fatty acid to an inner surface of a die heated to 100 °C or more; and

charging iron powder into said die and compacting said iron powder at a pressure of 600 MPa or more.

15. (Amended) The method of forming a powder compact of claim ¹⁴13, wherein said metal salt of a higher fatty acid is a lithium salt, a calcium salt or a zinc salt of a higher fatty acid.

16. (Amended) The method of forming a powder compact of claim ¹⁴13, wherein said iron powder is compacted at a pressure of 785 MPa or more.

17. (Amended) A method of forming a powder compact, comprising:

applying, to an inner surface of a die which has been heated to a die temperature of 100°C or more, a dispersion fluid in which a metal salt of a higher fatty acid having a higher melting point than said die temperature is finely dispersed, thereby forming a coating of said metal salt of a higher fatty acid;

filling iron powder into said die and compacting said iron powder under a compacting pressure of 600 MPa or more, thereby providing a compact having a metallic soap coating on a surface which is in contact with said die; and

ejecting and taking out said compact from said die.

18. (Amended) A method of forming a powder compact comprising:

applying, to an inner surface of a die which has been heated to a die temperature of 100°C or more, a dispersion fluid in which a metal salt of a higher fatty acid having a higher melting point higher than said die temperature is finely dispersed, thereby forming a coating of said metal salt of a higher fatty acid;

filling iron powder into said die and compacting said iron powder under a compacting pressure of 600MPa or more, thereby providing a compact having a metallic soap coating on a surface which is in contact with said die; and

ejecting and taking out said compact from said die with an ejecting pressure of 3% or less of said compacting pressure.

19. (Amended) The method of forming a powder compact of claim ¹⁷16, wherein said compacting pressure is 686 MPa or more and said powder compact is removed from die with an ejecting pressure of 8 MPa or less.

20. (Amended) The method of forming a powder compact of claim ¹⁷16, wherein said compacting pressure is 700 MPa or more and ^{having an ejecting pressure of} ~~said ejecting pressure~~ is 15 MPa or less.

21. (Amended) The method of forming a powder compact of claim ¹⁷16, wherein said compacting pressure is 700 MPa or more and ^{having an ejecting pressure of} ~~said ejecting pressure~~ is 13 MPa or less.

22. (Amended) The method of forming a powder compact of claim ¹⁷16, wherein said compacting pressure is 700 MPa or more and ^{having an ejecting pressure of} ~~said ejecting pressure~~ is 10 MPa or less.

23. (Amended) The method of forming a powder compact of claim 17, wherein said metal salt dispersed in said dispersion fluid has a maximum particle diameter of 30 μm or less.

SUPPORT FOR THE AMENDMENTS

The amendments to the claims are supported by the claims as originally filed. Applicants note that these amendments were made solely for the purpose of clarifying the claims, and not to distinguish over prior art. In addition, these amendments are made without intending to limit the scope of equivalence of the amended claims. No new matter is believed to be added by entry of these amendments. Claims 1-23 are active.

REMARKS

The rejection of the claims under 35 U.S.C. § 102(e) over Unami is respectfully traversed. Applicants have filed herewith a certified English translation of the priority application, JP 11-354660, filed December 14, 1999. Unami was filed August 2, 2000.